

AMENDMENT TO THE CLAIMS

1. (Original) An isolated and purified human protein having an amino acid sequence selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38.
2. (Original) An isolated and purified human protein having an amino acid sequence which is at least 85% identical to an amino acid sequence selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38.
3. (Original) An isolated and purified human polypeptide comprising at least 6 contiguous amino acids of an amino acid sequence selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38.
4. (Original) A fusion protein comprising a first protein segment and a second protein segment fused together by means of a peptide bond, wherein the first protein segment consists of at least 6 contiguous amino acids selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38.
5. (Original) A preparation of antibodies which specifically bind to the human protein of claim 1.

Claims 6-7 (Cancelled)

8. (Currently Amended) A DNA construct for expressing all or a portion of a human protein having an amino acid sequence ~~selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, NO:23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38,~~ comprising:

a promoter; and

a polynucleotide segment encoding at least 6 contiguous amino acids of the human protein, wherein the polynucleotide segment is located downstream from the promoter, wherein transcription of the polynucleotide segment initiates at or 3' to the promoter.

9. (Currently Amended) A host cell comprising a DNA construct comprising:

a promoter; and
a polynucleotide segment encoding at least 6 contiguous amino acids of a human protein having an amino acid sequence selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, NO:23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38, wherein the polynucleotide segment is located downstream from the promoter and wherein transcription of the polynucleotide segment initiates at or 3' to the promoter.

10. (Currently Amended) A homologously recombinant cell having incorporated therein a new transcription initiation unit, wherein the new transcription initiation unit comprises in 5' to 3' order:

- (a) an exogenous regulatory sequence;
- (b) an exogenous exon; and
- (c) a splice donor site,

wherein the transcription initiation unit is located upstream to a coding sequence of a gene, wherein the gene comprises a nucleotide sequence selected from the group consisting of the nucleotide sequences shown in SEQ ID Nos:1, 2, 3, NO:4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19 and wherein the exogenous regulatory sequence controls transcription of the coding sequence of the gene.

11. (Currently Amended) A method of producing a human protein, comprising the steps of:

growing a culture of a cell comprising a DNA construct comprising (1) a promoter and (2) a polynucleotide segment encoding at least 6 contiguous amino acids of a human protein having an amino acid sequence selected from the group consisting of the amino acid sequences shown in SEQ ID Nos:20, 21, 22, NO:23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, and 38, wherein the polynucleotide segment is located downstream from the promoter and wherein transcription of the polynucleotide segment initiates at or 3' to the promoter; and

purifying the protein from the culture.

12. (Currently Amended) A method of producing a human protein, comprising the steps of:

growing a culture of a homologously recombinant cell having incorporated therein a new transcription initiation unit, wherein the new transcription initiation unit comprises in 5' to 3' order:

- (a) an exogenous regulatory sequence;
- (b) an exogenous exon; and
- (c) a splice donor site,

wherein the transcription initiation unit is located upstream to a coding sequence of a gene, wherein the gene comprises a nucleotide sequence ~~selected from the group consisting of the nucleotide sequences shown in SEQ ID Nos: 1, 2, 3, NO: 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, and 19~~ and wherein the exogenous regulatory sequence controls transcription of the coding sequence of the gene; and

purifying the protein from the culture.

13. (Original) A method of identifying a secreted polypeptide which is modified by rough microsomes, comprising the steps of:

translating a first portion of the population of cRNA molecules *in vitro* in the absence of rough microsomes whereby a first population of polypeptides is formed;

translating a first portion of the population of cRNA molecules *in vitro* in the absence of rough microsomes whereby a first population of polypeptides is formed;

translating a second portion of the population of cRNA molecules *in vitro* in the presence of rough microsomes whereby a second population of polypeptides is formed;

comparing the first population of polypeptides with the second population of polypeptides; and

detecting polypeptide members of the second population which have been modified by the rough microsomes.

14. (New) An isolated nucleic acid molecule comprising a polynucleotide consisting of:

- (a) a polynucleotide encoding amino acids from about 1 to about 203 of SEQ ID NO:23;
- (b) a polynucleotide encoding amino acids from about 2 to about 203 of SEQ ID NO:23;
- (b) the polynucleotide complement of the polynucleotide of (a) or (b); and

(c) an allelic variant of the polynucleotide of (a), (b) or (c) wherein the polynucleotide encodes a polypeptide that is a serine protease inhibitor.

15. (New) The isolated nucleic acid molecule of claim 14 which is DNA.

16. (New) A method of making a recombinant vector comprising inserting a nucleic acid molecule of claim 14 into a vector in operable linkage to a promoter.

17. (New) A recombinant vector produced by the method of claim 16.

18. (New) A method of making a recombinant host cell comprising introducing the recombinant vector of claim 17 into a host.

19. (New) A recombinant host cell produced by the method of claim 18.

20. (New) A recombinant method of producing a polypeptide of claim 14, comprising culturing a recombinant host cell comprising a nucleic acid molecule encoding said polypeptide under conditions such that said polypeptide is expressed and recovering said polypeptide.

21. (New) An isolated nucleic acid molecule comprising a polynucleotide encoding a polypeptide at least 85% identical to a polypeptide selected from the group consisting of:

(a) amino acids from about 1 to about 206 of SEQ ID NO:23; and

(b) amino acids from about 2 to about 206 of SEQ ID NO:23, wherein the polypeptide is a serine protease inhibitor.

22. (New) The polynucleotide of claim 21 wherein said polypeptide is at least 90% identical to the polypeptide of (a) or (b).

23. (New) The polynucleotide of claim 21 wherein said polypeptide is at least 95% identical to the polypeptide of (a) or (b).

24. (New) An isolated nucleic acid molecule comprising SEQ ID NO:4 or an allelic variant thereof, wherein said allelic variant encodes a serine protease inhibitor polypeptide.